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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,071	01/19/2007	Catherine Rougeot	296415US0PCT	6477
22850	7590	03/10/2009	EXAMINER	
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			LI, RUIXIANG	
			ART UNIT	PAPER NUMBER
			1646	
			NOTIFICATION DATE	DELIVERY MODE
			03/10/2009	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/593,071	<b>Applicant(s)</b> ROUGEOT ET AL.	
	<b>Examiner</b> RUIXIANG LI	<b>Art Unit</b> 1646	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-66 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-66 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____.                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____.  | 6) <input type="checkbox"/> Other: ____.                          |

## **REQUIREMENT FOR UNITY OF INVENTION**

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in response to this action, to elect a single invention to which the claims must be restricted.

I. Claims 1-9, 15, 16, 20, 21, and 65, a peptide that is a maturation product of the BPLP or a peptide derivative of thereof.

II. Claims 10-12, 17, 18, 61, 62, and 64, drawn to a nucleic acid that encodes a peptide that is a maturation product of the BPLP or a peptide derivative of thereof.

III. Claims 13, 14, 19, and 63, drawn to an antibody that specifically recognizes a maturation product of the BPLP or a peptide derivative of thereof.

IV. Claims 22-24, 33-42, and 46, drawn to a method of preventing or treating a disease wherein a modulation of the activity of a membrane metallopeptidase is sought which comprises administering a patient in need thereof with a peptide.

V. Claims 25 and 26, drawn to a method of preventing or treating pain which omprises administering a patient in need thereof with a peptide.

VI. Claims 27-29, drawn to a method of preventing or treating hydro-mineral imbalance which comprises administering a patient in need thereof with a peptide.

VII. Claims 30-32, drawn to a method of preventing or treating impaired interpersonal and behavioural disorder which comprises administering a patient in need thereof

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with a peptide.

VIII. Claims 43, 44, 47, and 48, drawn to a method of preventing or treating a disease which comprises administering a patient in need thereof a nucleic acid encoding a maturation product of the BPLP or a peptide derivative of thereof.

IX. Claims 45 and 49, drawn to a method of preventing or treating a disease which comprises administering a patient in need thereof an antibody that binds a maturation product of the BPLP or a peptide derivative of thereof .

X. Claims 50, 51, and 66, drawn to an in vitro method for prognosis or determination of the evolution of a condition involving an altered production of BPLP or of any of its maturation products, comprising detecting a BPLP protein or a maturation products thereof in a biological sample of a test subject with an antibody.

XI. Claim 52, drawn to an in vitro method for prognosis or diagnosis of a condition involving an altered production of BPLP or of any of its maturation products, comprising detecting a BPLP gene or its transcript in a biological sample of a test subject.

XII. Claims 53-55, drawn to an in vitro method for screening compounds for their ability to bind to the NEP binding site for the BPLP protein or of its maturation products.

XIII. Claims 56-58, drawn to an in vitro method for screening compounds for their ability to act as agonist or antagonist of the BPLP protein or maturation products thereof on NEP activity.

XIV. Claim 59, a molecular complex comprising a metallo-ectopeptidase receptor and

the BPLP protein or maturation products thereof.

XV. Claim 60, drawn to a method of preventing or treating diseases wherein a modulation of the activity of said membrane metallopeptidase is sought which comprises administering a patient in need thereof with an agent that modulates the interaction between endogenous BPLP protein or maturation product and a membrane metallopeptidase.

2. The groups of inventions listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Invention Group I-XV lack unity of invention because even though the inventions of these groups require the technical feature of a maturation product of the BPLP or a peptide derivative of thereof. This technical feature is not a special technical feature as it does not make a contribution over the prior art in view of Dickinson et al. (Current Eye Research 15:377-386, 1996). Dickinson et al. teach a BPLP peptide comprising the amino acid sequence of SEQ ID NO: 3 (ORFSR) (Figure 2A, amino acids 22-25 of BPLP). Therefore, the shared technical feature does not make a contribution over the prior art

Accordingly, Groups I-XV are not so linked by the same or a corresponding special technical feature as to form a single general inventive concept. Thus, unity of invention is lacking and restriction is appropriate.

***Species Election***

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species of disease are as listed in claims 29, 31-33, and 36-42.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise require all the limitations of an allowed generic claim.

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the species listed above are not regarded as being of similar nature because each disease possesses distinct pathological features.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48 (b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be

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accompanied by a petition under 37 CFR 1.48 (b) and by the fee required under 37 CFR 1.17 (I).

***Advisory Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ruixiang Li whose telephone number is (571) 272-0875. The examiner can normally be reached on Monday through Friday from 8:30 am to 5:00 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, can be reached on (571) 272-0835. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, please contact the Electronic Business Center (EBC) at the toll-free phone number 866-217-9197.

/Ruixiang Li/

Primary Examiner, Art Unit 1646

Ruixiang Li, Ph.D.

March 3, 2009